AMENDMENTS TO THE CLAIMS

1-98 (Canceled)

99. (Currently amended) A composition comprising:

a substrate;

an array of nanostructured silicon columns defining a three-dimensional surface and an interface with a void volume, said array of nanostructured silicon columns extending from said surface, each of said array of nanostructured silicon columns having a width of between 20 and 30 nanometers and a lateral surface;

a plurality of metallic nanocrystals spaced uniformly along the lateral surface of each of said array of nanostructured silica columns between columns of said array of nanostructured silicon columns, said plurality of metallic nanocrystals exhibiting surface plasmon resonance.

100. (Previously presented) The composition of claim 99 wherein said substrate is planar glass.

101. (Previously presented) The composition of claim 99 wherein said array of nanostructured silicon columns have an average columnar separation of 20 nanometers.

102. (Previously presented) The composition of claim 99 wherein said array of nanostructured silicon columns has a height of less than 2000 Angstroms and a columnar width of 20 to 30 nanometers.

103. (Previously presented) The composition of claim 99 wherein the three-dimensional surface has an oxide layer underlying said plurality of metallic nanocrystals.

104. (Previously presented) The composition of claim 99 wherein said plurality of metallic nanocrystals are formed from the element of silver, gold, copper, iron, palladium, or platinum.

105. (Previously presented) The composition of claim 99 wherein one of said plurality of metallic nanocrystals bridges two spatially separated adjacent columns of said array of nanostructured silicon columns.

106. (Canceled)

107. (Previously presented) A composition comprising:

a substrate;

an array of nanostructured semiconductor columns defining a three-dimensional surface and an interface with a void volume and extending from said surface with an average separation between adjacent columns of said array of nanostructured semiconductor columns;

a plurality of metallic nanocrystals where a single nanocrystal of said plurality of metallic nanocrystals bridges two spatially separated adjacent columns of said array of nanostructured semiconductor columns, said plurality of metallic nanocrystals exhibiting surface plasmon resonance.

108. (Previously presented) The composition of claim 107 wherein said array of nanostructured silicon columns have an average columnar separation of 20 nanometers.

109. (Previously presented) The composition of claim 107 wherein the three-dimensional surface has an oxide layer underlying said plurality of metallic nanocrystals.

110. (Previously presented) The composition of claim 107 wherein said plurality of metallic nanocrystals are formed from the element of silver, gold, copper, iron, palladium, or platinum.

111-115 (Canceled)